

CLAIMS:

1. A separation method comprising:

introducing a first fluid comprising first and second components having generally different density into a centrifugal field;

allowing an interface to form between at least portions of the first and second components at a first location;

moving the interface from the first location to a second location;

introducing the first fluid and removing at least one of the first and second components at known controlled flow rates so as to move the interface from the second location in a direction toward the first location and to return the interface to the second location; and

determining the flow rate of the first or second component within the first fluid, such determining being based, at least in part, on a time interval between when the interface moves from and returns to the second location.

2. The method of claim 1 including determining the weight of one component removed during the time interval.

3. The method of claim 1 further comprising an axis of rotation and the interface being generally located at a radial

position relative to the axis of rotation and the removing including removing of one component from the radially inner side of the interface.

4. The method of claim 1 wherein the first fluid comprises whole blood.

5. The method of claim 4 in which the first component substantially comprises plasma.

6. The method of claim 4 wherein the second component substantially comprises red blood cells.

7. The method of claim 1 wherein the one component substantially comprises plasma.

8. The method of claim 7 in which the plasma includes platelets.

9. The method of claim 1 wherein the second location is defined by a component removal passage for removing one of the first and second components from the centrifugal field.

10. The method of claim 1 wherein moving the interface from the second location to the first location includes reducing the rate of removal of the one of the first and second components.

11. The method of claim 10 in which the rate of removal is substantially zero.

12. The method of claim 11 wherein returning the interface to the second location includes increasing the rate of removal of one of the first and second components to a known controlled flow rate.

13. The method of claim 1 wherein determining is based, at least in part, on the known controlled flow rates during moving the interface from and returning to the second location.

14. The method of claim 1 wherein determining the flow rate is based on the first named time interval and a second time interval which is measured between when the interface moves from the first location and returns to the second location.

15. The method of claim 2 wherein the one component removed during the time interval is essentially plasma.

16. The method of claim 9 wherein at least a portion of the first and second components are removed through the component removal passage when the interface is at the second location.

17. The method of claim 16 in which the first component substantially comprises plasma and the second component substantially comprises red blood cells.

18. The method of claim 1 further comprising returning at least a portion of the one component which has been removed.